

Attorney Dkt. No. PU3610USw  
S/N 09/889,471

**In the claims:**

Please cancel claims 3, 4, 26-36, 41-48, 55, 56, 58-63 and 91-181.

Please amend the claims as follows:

1. (Previously presented) A method of screening an RTA for its capacity to affect lipodystrophy or dyslipidemia in a patient, comprising

- (a) administering the RTA to a mesenchymal stem cell or pre-adipocyte cell under culture conditions appropriate for adipogenesis; and
- (b) monitoring the cell for an inhibition of adipogenesis; whereby inhibition of adipogenesis indicates the RTA has the capacity to increase lipodystrophy or dyslipidemia in the patient.

2. (Previously presented) The method of claim 1, wherein the RTA is administered to a mesenchymal stem cell.

3-70. (Cancelled)

71. (Previously presented) The method of claim 1, wherein the RTA is a protease inhibitor.

72. (Previously presented) The method of claim 1, wherein the RTA is a NRTI.

73. (Previously presented) The method of claim 1, wherein the culture conditions comprise culturing the cell in the presence of a receptor ligand selected from the group consisting of a PPAR $\gamma$  ligand, a RXR ligand, a retinoic acid receptor ligand, insulin, an insulin-like growth factor, a glucocorticoid receptor ligand, and a cAMP-elevating agent.

Attorney Dkt. No. PU3610USw  
S/N 09/889,471

74. (Previously presented) The method of claim 73, wherein the receptor ligand is a PPAR $\gamma$  ligand.

75. (Previously presented) The method of claim 74, wherein the PPAR $\gamma$  ligand is an agonist of PPAR $\gamma$ .

76. (Previously presented) The method of claim 75, wherein the PPAR $\gamma$  agonist is a thiazolidinedione.

77. (Previously presented) The method of claim 73 wherein the receptor ligand is a RXR ligand.

78. (Previously presented) The method of claim 77, wherein the RXR ligand is an agonist of RXR.

79. (Previously presented) The method of claim 78, wherein the RXR agonist is LGDI069, LGI00268, 9-cis retinoic acid, or all-trans retinoic acid.

80. (Previously presented) The method of claim 73, wherein the receptor ligand is a retinoic acid receptor ligand.

81. (Previously presented) The method of claim 80, wherein the retinoic acid ligand is CH55, 9-cis retinoic acid, or all-trans retinoic acid.

82. (Previously presented) The method of claim 73, wherein the receptor ligand is insulin.

83. (Previously presented) The method of claim 73, wherein the receptor ligand is an insulin-like growth factor.

Attorney Dkt. No. PU3610USw  
S/N 09/889,471

84. (Previously presented) The method of claim 71, wherein the protease inhibitor is an aspartyl protease inhibitor.

85. (Previously presented) The method of claim 84, wherein the aspartyl protease inhibitor is a viral aspartyl protease inhibitor.

86. (Previously presented) The method of claim 85, wherein the viral aspartyl protease inhibitor is an HIV protease inhibitor.

87. (Previously presented) The method of claim 72, wherein the NRTI is an HIV NRTI.

88. (Previously presented) The method of claim 2, wherein the mesenchymal stem cell has the characteristics of a C3H10T1/2 cell.

89. (Previously presented) The method of claim 88, wherein the mesenchymal stem cell is a mammalian primary cell.

90. (Previously presented) The method of claim 89, wherein the mammalian primary cell is a human primary cell.

91.-181 (Cancelled)